## **Solution Sheet**

1. Which model have you used for probability prediction? Explain your model.

I have divided the dataset into two parts medical and normal. I have imputed values in the medical part of the dataset and used a random forest regressor on the whole dataset to make predictions. I did not use a linear model since there was absolutely no correlation between any of the features and target variables. Splitting was done to make use of maximum data and minimise imputing or dropping of nan values.

Which model have you used for Diuresis Time series prediction? Explain your model.

On analyzing plots of most time series values given. The data looked mostly linear which is why a linear autoregression model was fit on the given dataset to predict future values. Simple linear regression is used to predict

time series values with a lag of 1. Initial plan was to fit a suitable exponential function instead of a line, but I could not implement it because I ran out of time.